



Case report

Accidental penetrating brain injury through anterior fontanelle: A rare phenomenon

Shahbaz H. Faridi MS, Dr. ^{a,*}, V.K. Srivastava MS, Mch, Prof. ^a, M.F. Hoda MS, Mch, Dr. ^a,
Mohd Khalid MD, Radiologist ^b

^a Department of Surgery, J.N. Medical College, AMU, Aligarh, Uttar Pradesh, India

^b Department of Radiodiagnosis, J.N. Medical College, AMU, Aligarh, Uttar Pradesh, India

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ABSTRACT

Penetrating injuries of the anterior fontanelle are exceedingly uncommon and are most often associated with inflicted injury.^{4,6} This report of a 7-month-old male infant, whose father was working with a knife which accidentally slipped from his hand and penetrated the infants anterior fontanelle and frontal lobe, demonstrates that accidental injuries may also occur rarely.

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1. Introduction

Fontanelles are soft spots on a baby's head which, during birth, enable the bony plates of the skull to flex, allowing the child's head to pass through the birth canal.¹ The ossification of the bones of the skull causes the fontanelles to close around 18 months to 2 years of age.¹ Infanticidal and child abuse cases with similar injury to the brain have been reported previously in the literature³ but accidental injuries to the brain through the anterior fontanelle are very rare.^{2,5}

2. Case report

A 7-month-old male infant was brought to the emergency department with a history of injury over the frontal region by a knife which had accidentally slipped from his father's hand while working. The child was having persistent vomiting. On local examination, there was a laceration around 3 cm in size present over the anterior fontanelle (Fig. 1). His glasgow coma scale (GCS) was 15/15; there was bilateral sixth nerve palsy as suggested by the convergent squint seen in both eyes.

Immediately, non contrast computerised tomography of the head was done which revealed a haematoma in the right frontal



Fig. 1. Clinical photograph of the child showing laceration over the anterior fontanelle and bilateral convergent squint.

* Corresponding author. Tel.: +91 9897127431; fax: +91 5712721127.

E-mail address: shahbazfaridi@yahoo.com (S.H. Faridi).

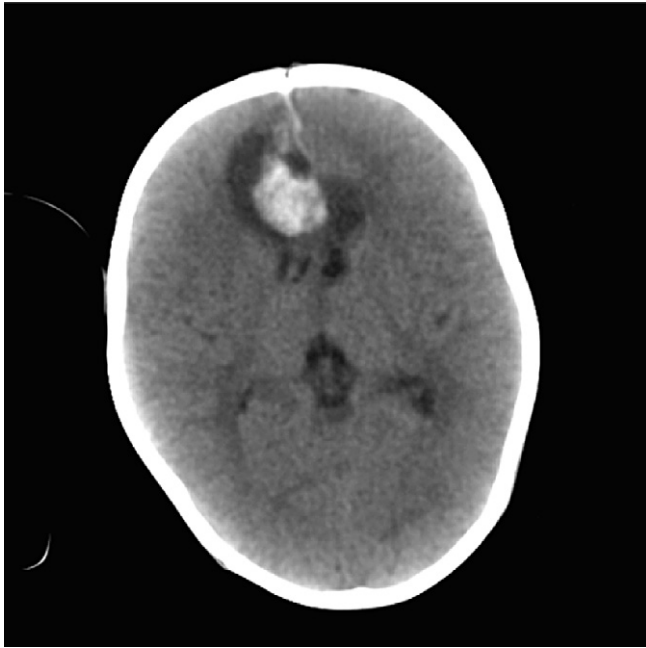


Fig. 2. Non contrast Computerized Tomography scan of the brain showing haematoma in the frontal region with mass effect and effacement of ipsilateral lateral ventricle and midline shift of 0.2 cm.

region causing mass effect in the form of effacement of ipsilateral lateral ventricle and a midline shift of 0.2 cm (Fig. 2).

The child was managed conservatively and improved.

3. Discussion

Penetrating injuries of the anterior fontanelle are exceedingly uncommon and are most often associated with inflicted injury.² This report of a 7-month-old male infant, who was injured accidentally by a knife which penetrated his anterior fontanelle and right frontal lobe, demonstrates that accidental injuries may also occur rarely.

Conflict of interest

None of the authors have any conflict of interest to disclose.

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Ethical approval

Not required.

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